WHAT IS CLAIMED IS:

1. An isolated polynucleotide selected from the group consisting of:
   - (a) an isolated polynucleotide encoding a human G-protein coupled receptor, or functional fragment thereof, comprising the amino acid sequence as set forth in SEQ ID NO:2;
   - (b) An isolated composition comprising the polynucleotide according to (a).
   - (c) An isolated polynucleotide comprising SEQ ID NO:1;
   - (d) An isolated polynucleotide having the nucleic acid sequence of ATCC Accession No. PTA-2966;
   - (e) An isolated polynucleotide having the nucleic acid sequence according to nucleotides 4 to 1524 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide of SEQ ID NO:2 minus the start codon;
   - (f) An isolated polynucleotide having the nucleic acid sequence according to nucleotides 1 to 1524 of SEQ ID NO:1, wherein said nucleotides encode a polypeptide of SEQ ID NO:2 including the start codon;
   - (g) A polynucleotide which is fully complementary to the polynucleotide according to (a) thru (f); and
   - (h) A hybridization probe comprising the polynucleotide according to (a) thru (g).
2. An expression vector containing the polynucleotide according to claim 1.
3. A host cell containing the expression vector according to claim 2.
4. A substantially purified G-protein coupled receptor polypeptide selected from the group consisting of:
   - (a) A substantially purified G-protein coupled receptor polypeptide comprising an amino acid sequence as set forth in SEQ ID NO:2.
   - (b) The polypeptide according to (a), wherein the amino acid sequence differs from SEQ ID NO:2 only by conservative substitutions;
   - (c) An isolated and substantially purified G-protein coupled receptor polypeptide encoded by the nucleic acid sequence of ATCC Accession No. PTA-2966;

(d) An isolated polypeptide having the amino acid sequence according to amino acids 2 to 508 of SEQ ID NO:2, wherein said amino acid encode a polypeptide of SEQ ID NO:2 minus the start methionine;

(e) An isolated polypeptide having the amino acid sequence according to amino acids 1 to 508 of SEQ ID NO:2, wherein said amino acid encode a polypeptide of SEQ ID NO:2 including the start methionine;

(f) A substantially purified fragment of the G-protein coupled receptor polypeptide according to any one of (a) to (e).

5. A substantially purified fusion protein comprising an amino acid sequence as set forth in SEQ ID NO:2 and an amino acid sequence of an Fc portion of a human immunoglobulin protein.

6. A pharmaceutical composition comprising the polypeptide, or a functional fragment thereof, according to claim 1, and a pharmaceutically acceptable diluent or excipient.

7. A purified antibody which binds specifically to the polypeptide according to claim 4, or an antigenic epitope thereof.

8. A method of screening a library of molecules or compounds with a polynucleotide to identify at least one molecule or compound therein which specifically binds to the polynucleotide sequence, comprising:

(a) combining the polynucleotide according to claim 1, with a library of molecules or compounds under conditions to allow specific binding; and

(b) detecting specific binding, thereby identifying a molecule or compound, which specifically binds to a G-protein coupled receptor-encoding polynucleotide sequence.

9. The method according to claim 8, wherein the candidate compounds are small molecules, therapeutics, biological agents, or drugs.

10. A method of screening for candidate compounds capable of modulating activity of a G-protein coupled receptor-encoding polypeptide, comprising:

(a) contacting a test compound with a cell or tissue expressing the polypeptide according to claim 4; and

(b) selecting as candidate modulating compounds those test compounds that modulate activity of the G-protein coupled receptor polypeptide.

11. A method of treating a neurological disorder in a mammal comprising administration of the G-protein coupled receptor polypeptide or homologue according to any one of claims 1, 4, or, 5 in an amount effective to treat the neurological disorder.

12. A substantially purified G-protein coupled receptor polypeptide consisting of an amino acid sequence as set forth in SEQ ID NO:2.

13. The polypeptide according to claim 12, wherein the amino acid sequence differs from SEQ ID NO:2 only by conservative substitutions.

14. An isolated and purified polynucleotide encoding a human G-protein coupled receptor, or functional fragment thereof, consisting of the amino acid sequence as set forth in SEQ ID NO:2.

15. A method of treating a disease, disorder, or condition related to the brain comprising administering the G-protein coupled receptor polypeptide or homologue according to claim 12 or 13 in an amount effective to treat the brain-related disorder.

16. The polypeptide of claim 12 or 13, further comprising the polypeptide expressed in the caudate nucleus, substantia nigra, thalamus, amygdala, hippocampus, cerebellum, and corpus collosum.

17. A cell comprising NFAT/CRE and the polypeptide of claim 12 or 13.

18. A cell comprising NFAT G alpha 15 and the polypeptide of claim 12 or 13.

19. A method of screening for candidate compounds capable of modulating activity of a G-protein coupled receptor-encoding polypeptide, comprising:

(a) contacting a test compound with a cell or tissue expressing the polypeptide according to claim 12 or 13; and

(b) selecting as candidate modulating compounds those test compounds that modulate activity of the G-protein coupled receptor polypeptide.

20. The method according to claim 19, wherein the candidate compounds are agonists or antagonists of G-protein coupled receptor activity.

21. The method according to claim 20, wherein the polypeptide activity is associated with the brain.

22. The method according to claim 20, wherein the candidate modulating compounds are peptides.